

PROJECT DESCRIPTION

I. GENERAL:

THIS PROJECT INVOLVES RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL, INCLUDING THE ADDITION OF AN EXCLUSIVE/PERMISSIVE LEFT-TURN PHASE FOR NORTHBOUND TRAFFIC AT THE INTERSECTION OF MD 713 (RIDGE ROAD) AND SEVERN ROAD/RIDGEWOOD ROAD IN ANNE ARUNDEL COUNTY. MD 713 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION:

THE INTERSECTION SHALL OPERATE IN A NEMA SIX-PHASE, FULLY-ACTUATED MODE. THE MD 713 EXCLUSIVE/PERMISSIVE LEFT-TURNS WILL OPERATE CONCURRENTLY OR WITH THEIR THROUGH MOVEMENTS. SEVERN ROAD AND RIDGEWOOD ROAD SHALL OPERATE CONCURRENTLY.

VIDEO CAMERAS WILL PROVIDE PRESENCE DETECTION FOR MD 713 LEFT-TURNS, AND FOR RIDGEWOOD ROAD AND SEVERN ROAD TRAFFIC. A VIDEO CAMERA WILL PROVIDE ADVANCE PASSAGE DETECTION ALONG SEVERN ROAD. NON-INVASIVE DETECTORS WILL PROVIDE ADVANCE PASSAGE DETECTION ALONG MD 713.

THE INTERSECTION LIGHTING AND STREET NAME SIGNS WILL BE UPDATED TO CURRENT STANDARDS.

A PROPOSED 'S' TYPE BASE-MOUNTED CABINET WITH NEMA CONTROLLER AND ALL NECESSARY EQUIPMENT SHALL BE INSTALLED AT THE INTERSECTION

III. PROJECT CONTACTS:

1. THE CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

- MS. KIMBERLY TRAN, ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1019
- MR. JAMES FOLDEN, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION
PHONE: (410) 841-1031
- MR. JOHN S. MAYS, ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-1013
- MR. MIKE HUBER, UTILITY ENGINEER
PHONE: (410) 841-1039
- MR. RICHARD DAFF, SR., CHIEF - TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630
- MR. EDWARD RODENHIZER, CHIEF - SIGNAL SHOP
PHONE: (410) 787-7652
- MR. SONNY BAILEY, CHIEF - SIGN SHOP
PHONE: (410) 787-7676

THE POWER COMPANY REPRESENTATIVE IS:

BALTIMORE GAS AND ELECTRIC
1068 NORTH FRONT STREET
BALTIMORE, MARYLAND 21202
(410) 637-8713

2. MAINTENANCE OF TRAFFIC WILL BE HANDLED BY THE CONTRACTOR UTILIZING THE STANDARD PLATES FOR TRAFFIC CONTROL FROM SECTION MD 104 OF THE SHA BOOK OF STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES.

EQUIPMENT LIST 'A'

A. EQUIPMENT TO BE SUPPLIED BY SHA AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
9000	1 EA	NEMA EIGHT-PHASE, FULLY-ACTUATED CONTROLLER, VIDEO DETECTION INTERFACE EQUIPMENT, AND ALL NECESSARY EQUIPMENT HOUSED IN AN 'S' TYPE BASE-MOUNTED CABINET
9570	34 SF	SHEET ALUMINIUM GROUND-MOUNTED SIGNS M1-5(6) "SHIELD ASSEMBLY SIGNS" 1 EA NORTH, MD 713, RIGHT ARROW (30"x 48") 1 EA NORTH, MD 713, LEFT ARROW (48"x 72")
9571	95 SF	SHEET ALUMINIUM MAST ARM/POLE-MOUNTED SIGNS 1 EA D-3(1) "Severn RD RIGHT ARROW / LEFT ARROW Severn RD" BACK-TO-BACK (VARIBALE x 16") 1 EA D-3(1) "LEFT ARROW Ridgewood RD/ Ridgewood RD RIGHT ARROW" BACK-TO-BACK (VARIBALE x 16") 2 EA D-3(1) "Ridge RD" DUAL-FACED (VARIBALE x 16") 1 EA W3-3 "SIGNAL AHEAD" SYMBOL FL/Y (48"x48") M1-5(6) "SHIELD ASSEMBLY SIGNS" 1 EA SOUTH, MD 713, RIGHT ARROW (30"x 48") 1 EA SOUTH, MD 713, LEFT ARROW (48"x 72")

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12
PHASE 1 & 5	FL/Y	FL/Y	←G←R	←G←R	R	←G←R	←G←R	R	R	R	R	R
I & 5 CHANGE	THE CONTROLLER MAY SKIP TO PHASE 1 & 6, 2 & 5, OR 2 & 6											
PHASE 1 & 6	FL/Y	FL/Y	←G←G	←G←G	G	R	R	R	R	R	R	R
I & 6 CHANGE	FL/Y	FL/Y	←Y←Y	←Y←Y	Y	R	R	R	R	R	R	R
PHASE 2 & 5	FL/Y	FL/Y	R	R	R	←G←G	←G←G	G	R	R	R	R
2 & 5 CHANGE	FL/Y	FL/Y	R	R	R	←Y←Y	←Y←Y	Y	R	R	R	R
PHASE 2 & 6	FL/Y	FL/Y	G	G	G	G	G	G	R	R	R	R
2 & 6 CHANGE	FL/Y	FL/Y	Y	Y	Y	Y	Y	Y	R	R	R	R
PHASE 4 & 8	FL/Y	FL/Y	R	R	R	R	R	R	G	G	G	G
4 & 8 CHANGE	FL/Y	FL/Y	R	R	R	R	R	R	Y	Y	Y	Y
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R

EQUIPMENT LIST 'B'

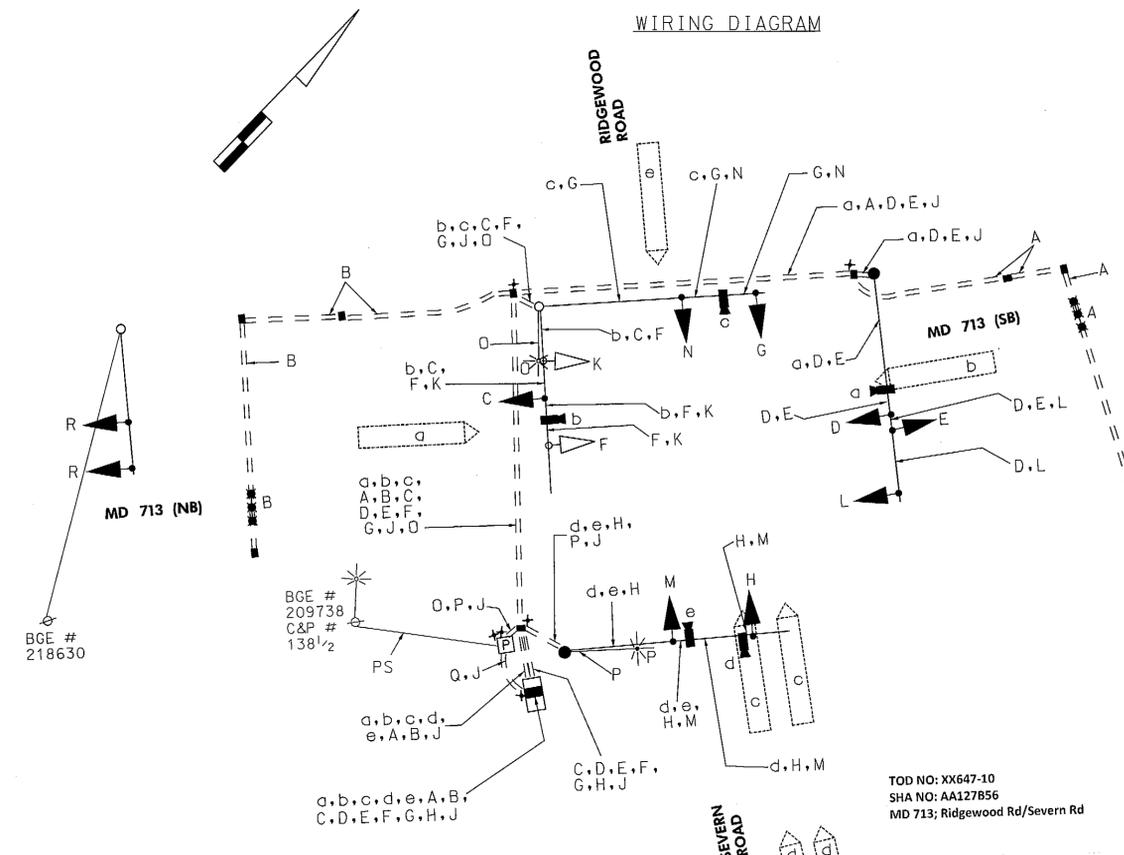
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
2002	3 CY	TEST PIT EXCAVATION
5001	56 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT MARKINGS
5005	65 LF	24" WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING
8001	26 EA	12" LED SIGNAL HEAD SECTION
8004	6 EA	8" LED SIGNAL HEAD SECTION
8007	1 EA	ANY SIZE LIGHTING ARM ON SIGNAL STRUCTURE WITH 250 WATT HPS LUMINAIRE
8011	1 EA	CONDUIT BEND IN EXISTING FOUNDATION BASE (ANY SIZE)
8012	1 EA	EMBEDDED METERED SERVICE PEDESTAL
8018	2 EA	MAST ARM POLE AND 50' MAST ARM, ANY 'T' DIMENSION
8022	2 EA	NON-INVASIVE DETECTOR (ANY LENGTH) LEAD-IN CABLE
8023	1 EA	REMOVE AND DISPOSE OF EXISTING EQUIPMENT - PER ASSIGNMENT
8028	5 EA	VIDEO DETECTION CAMERA AND CABLE (ANY LENGTH)
8034	200 LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TRAY
8036	270 LF	UP TO 4" SCHEDULE 80 RIGID PVC CONDUIT - BORED
8038	880 LF	UP TO 4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8039	19 LF	WOOD SIGN SUPPORTS UP TO 4" X 6"
8040	129 SF	INSTALL OVERHEAD OR GROUND-MOUNTED SIGNS (INCLUDING ALL HARDWARE)
8042	300 LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8045	60 LF	ELECTRICAL CABLE - 1 CONDUCTOR (NO. 8 AWG)
8046	9 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8055	100 LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8056	1000 LF	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8062	1 EA	INSTALL CONTROLLER AND CABINET - BASE MOUNTED

EQUIPMENT LIST 'C'

C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

WIRING DIAGRAM



WIRING KEY

- a,b,c - VIDEO DETECTION CAMERA WITH LEAD-IN CABLE TO CABINET
- A,B - NON-INVASIVE DETECTOR WITH LEAD-IN CABLE TO CABINET
- C,D,E - ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
- F,G,H - ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
- K,L - ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TRAY
- M,N - ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG) TRAY
- O,P - PROPOSED SERVICE - 1 CONDUCTOR (NO. 8 AWG)
- Q - NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
- R - EXISTING HIB WIRING
- PS - PROPOSED SERVICE FEED BY BGE
- + - PROPOSED GROUND ROD

SHA STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION
MD 713 (RIDGE ROAD) AND
SEVERN ROAD / RIDGEWOOD ROAD
HANOVER, MARYLAND

GENERAL INFORMATION SHEET

SCALE: NONE	ADVERTISED DATE: OCT 10, 2011	CONTRACT NO. XX6475195
DESIGNED BY: EMM	COUNTY: ANNE ARUNDEL	
DRAWN BY: EMM	LOGMILE: 02071303.40	
CHECKED BY: MR./NR	TIMS NO. K715	
F.A.P. NO.	TOD NO.	

TS NO. 2631D-GI	DRAWING: SG-02 OF 2	SHEET NO. 2 OF 2
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CENTURY ENGINEERING
CONSULTING ENGINEERS - PLANNERS
10710 GILROY ROAD
HUNT VALLEY, MD 21031

REVISION 'D' PROJECT NO. 101195.45